



LABORATORY REPORT

Prepared For: Burns & McDonnell Project: 62589

9400 Ward Parkway Kansas City, MO 64114

Attention: Diana Marquez Sampled: 03/29/12

Received: 03/30/12 Issued: 04/17/12 12:13

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NELAP #01109CA / AZ100001 California ELAP#2446 Arizona DHS#AZ0728 Nevada #AZ01030 ORELAP #AZ100001

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is an integral part of this report.

This entire report was reviewed and approved for release.

CASE NARRATIVE

LABORATORY ID	CLIENT ID	MATRIX
PVC2180-01	DP-125 W06	Water
PVC2180-02	DP-120 W01	Water
PVC2180-03	DP-120 W02	Water
PVC2180-04	DUP-6 W02	Water

SAMPLE RECEIPT: Samples were received intact, at 4°C, on ice and with chain of custody documentation.

HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the TestAmerica

Sample Acceptance Policy unless otherwise noted in the report.

PRESERVATION: Samples requiring preservation were verified prior to sample analysis.

QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.

COMMENTS: No significant observations were made.

SUBCONTRACTED: No analyses were subcontracted to an outside laboratory.

Reviewed By:

TestAmerica Phoenix

Linda Eshelman Project Manager



THE LEADER IN ENVIRONMENTAL TESTING

4625 East Cotton Center Blvd. Ste 189, Phoenix, AZ 85040 (602) 437-3340 Fax:(602)

Burns & McDonnell Project ID: 62589

 9400 Ward Parkway
 Sampled: 03/29/12

 Kansas City, MO 64114
 Report Number: PVC2180
 Received: 03/30/12

Attention: Diana Marquez

1,4-DIOXANE BY GC/MS (EPA 3520C/8270C MOD)

Analyte	Method	Batch	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: PVC2180-01 (DP-125 W06 - Reporting Units: ug/l 1,4-Dioxane Surrogate: 1,4-Dioxane-d8 (14-125%) Surrogate: Nitrobenzene-d5 (27-143%)	Water) EPA 8270C	12D0160	1.0	ND 82 % 88 %	1	4/4/2012	4/12/2012	
Sample ID: PVC2180-02 (DP-120 W01 - Reporting Units: ug/l 1,4-Dioxane Surrogate: 1,4-Dioxane-d8 (14-125%) Surrogate: Nitrobenzene-d5 (27-143%)	Water) EPA 8270C	12D0160	1.0	2.1 82 % 41 %	1	4/4/2012	4/12/2012	
Sample ID: PVC2180-03 (DP-120 W02 - Reporting Units: ug/l 1,4-Dioxane Surrogate: 1,4-Dioxane-d8 (14-125%) Surrogate: Nitrobenzene-d5 (27-143%)	Water) EPA 8270C	12D0218	1.0	2.3 77 % 84 %	1	4/5/2012	4/12/2012	
Sample ID: PVC2180-04 (DUP-6 W02 - V Reporting Units: ug/l 1,4-Dioxane Surrogate: 1,4-Dioxane-d8 (14-125%) Surrogate: Nitrobenzene-d5 (27-143%)	Vater) EPA 8270C	12D0218	1.1	2.5 63 % 74 %	1.11	4/5/2012	4/12/2012	



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METHOD BLANK/QC DATA

1,4-DIOXANE BY GC/MS (EPA 3520C/8270C MOD)

		Reporting		Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 12D0160 Extracted: 04/04/	12									
Blank Analyzed: 04/11/2012 (12D0	160-BLK1)									
1,4-Dioxane	ND	1.0	ug/l							
Surrogate: 1,4-Dioxane-d8	14.4		ug/l	20.0		72	14-125			
Surrogate: Nitrobenzene-d5	17.3		ug/l	20.0		86	27-143			
LCS Analyzed: 04/11/2012 (12D01	60-BS1)									Q8
1,4-Dioxane	20.4	1.0	ug/l	20.0		102	85-116			
Surrogate: 1,4-Dioxane-d8	14.6		ug/l	20.0		73	23-132			
Surrogate: Nitrobenzene-d5	17.5		ug/l	20.0		88	28-150			
LCS Dup Analyzed: 04/11/2012 (12	2D0160-BSD1)									Q8
1,4-Dioxane	19.6	1.0	ug/l	20.0		98	85-116	4	20	
Surrogate: 1,4-Dioxane-d8	14.3		ug/l	20.0		72	23-132			
Surrogate: Nitrobenzene-d5	16.7		ug/l	20.0		84	28-150			
Batch: 12D0218 Extracted: 04/05/	12									
Blank Analyzed: 04/11/2012 (12D0	218-BLK1)									
1,4-Dioxane	ND	1.0	ug/l							
Surrogate: 1,4-Dioxane-d8	14.2		ug/l	20.0		71	14-125			
Surrogate: Nitrobenzene-d5	17.0		ug/l	20.0		85	27-143			
LCS Analyzed: 04/11/2012 (12D02	18-BS1)									
1,4-Dioxane	19.2	1.0	ug/l	20.0		96	85-116			
Surrogate: 1,4-Dioxane-d8	15.6		ug/l	20.0		78	23-132			
Surrogate: Nitrobenzene-d5	16.0		ug/l	20.0		80	28-150			
LCS Dup Analyzed: 04/11/2012 (12	2D0218-BSD1)									
1,4-Dioxane	19.8	1.0	ug/l	20.0		99	85-116	3	20	
Surrogate: 1,4-Dioxane-d8	15.9		ug/l	20.0		80	23-132			
Surrogate: Nitrobenzene-d5	17.2		ug/l	20.0		86	28-150			

TestAmerica Phoenix

Linda Eshelman Project Manager



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DATA QUALIFIERS AND DEFINITIONS

Q8 Insufficient sample received to meet method QC requirements. Batch QC requirements satisfy ADEQ policies

0154.000 and 0155.000.

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.

RPD Relative Percent Difference



Request for Chemical Analysis and Chain of Custody Record

PVCZ180

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Burns & McDonnell Engineering				aboratory: TEST AMENTOA									Document Control No: 0329/2D										
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Kansas City, Phone: (816)	αi	ddress: 4025 COTTON CANTRA BLUD STE 189										\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\											
Attention: DIANA NARQUEZ				tity/State/Zip: PHORNER AZ \$5090																			
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Project Number: 62589														rrof Analysis									
Client Name:	BUALTY	i AWALY;	1100	AL SMAUTERS Matrix									Number of Containers Containers Remark										
Sample Number				Sample Event Sample Depth (in feet)					Sample Collected <u>:</u>					5 / 🗗 / /					/ / /				
Group or SWMU Name	Sample Point	Sample Designator	. F	Round	Year	From	То	Date	Time	Liquid	Solid	Gas		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		/ (/			Remarks	www.		
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